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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,400	03/19/2001	Lester F. Ludwig	LUDW-001/02-03US	7356

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EXAMINER
FLETCHER, MARLON T

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/812,400	LUDWIG, LESTER F.	
	Examiner	Art Unit	
	Marlon T Fletcher	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-15 and 18-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-15 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sgroi (5,357,048).

As recited in claims 1 and 2, Sgroi discloses a system for the generation of at least one outgoing realtime digital control signal based on at least one incoming control signal, the system comprising: an incoming control signal interface (54) adapted to receive the at least one incoming control signal; at least one control signal generator (62) adapted to generate the at least one outgoing real-time digital control signal based on the at least one incoming control signal, wherein said at least one control signal generator is selected from the group consisting of a low frequency oscillator, and a transient generator; an outgoing control signal interface (66) adapted to communicate the generated at least one outgoing real-time digital control signal; and wherein the at least one incoming control signal is used to control events (58) and parameters associated with the at least one control signal generator as seen in figure 3.

As recited in claims 3 and 13, Sgroi discloses the system, wherein said at least one outgoing real-time digital control signal is in the form of a MIDI message (figure 4).

As recited in claims 4 and 14, Sgroi discloses the method, wherein said at least one outgoing real-time digital control signal is in the form of a MIDI message (figure 4).

As recited in claims 7-12, Sgroi discloses the system, wherein the at least one control signal generator is a transient generator comprising an envelope generator with at least one parameter controlled by the at least one incoming control signal; wherein the at least one control signal generator is a transient generator comprising a ramp generator with at least one parameter controlled by the at least one incoming control signal; wherein the at least one control signal generator is a transient generator comprising a slew limiter with at least one parameter controlled by the at least one incoming control signal as can be seen in figures 1 and 3, wherein as discussed in relation to figures 1 and 3, variations are applied to the incoming signals.

As recited in claim 15, Sgroi discloses the method for generating at least one outgoing digital control signal utilizing at least one control signal processor (62), the method comprising: processing a first incoming real-time control signal (figures 1, 3, and 4); processing a second incoming control signal (figures 1, 3, and 4); generating the at least one outgoing digital control signal based upon a nonmerging combination of the first incoming real-time control signal and the second incoming control signal as seen in figures 1, 3, and 4; and wherein the first incoming real-time control signal, the second incoming control signal, and the at least one outgoing digital control signal comprise MIDI messages as seen in figure 3.

As recited in claim 18, Sgroi discloses the method, wherein both the first incoming real-time control signal and the second incoming control signal comprise

values, and wherein the control signal processor performs one operation selected from the group consisting of: multiplication of the values of the first and second incoming control signals; addition of the values of the first and second incoming control signals as seen in figures 1 and 3.

As recited in claim 19, Sgroi discloses method, wherein a temporal sequence of the first and second incoming control signals is used to generate the at least one outgoing digital control signal as seen in figure 3.

As recited in claim 20, Sgroi discloses the method for processing an incoming real-time MIDI control signal, the method comprising: receiving the incoming real-time MIDI control signal; generating an outgoing real-time MIDI control signal, wherein said generating is performed by one or more message conversion methods selected from the group consisting of: changing an incoming MIDI note number value to an outgoing MIDI continuous controller value; changing an incoming MIDI note velocity value to an outgoing MIDI continuous controller value; changing an incoming MIDI continuous controller value to an outgoing MIDI note value; changing an incoming MIDI continuous controller value to an outgoing MIDI continuous controller value with scaling; changing an incoming MIDI continuous controller value to an outgoing MIDI continuous controller value with offset; changing an incoming MIDI continuous controller value to an outgoing MIDI continuous controller value with complementary magnitude; changing an incoming MIDI note number value to an outgoing MIDI note number value according to variably transposed intelligent harmony that is controlled by the incoming real-time MIDI control signal; and communicating the generated outgoing real-time MIDI control signal to an

external system via an outgoing control signal interface wherein the above is discussed in column 4, lines 19-23; column 6, lines 9-36; and as seen in figures 3, 4, and 10.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 7-15, and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T Fletcher whose telephone number is 703-308-0848. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on 703-308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Marlon T Fletcher
Primary Examiner
Art Unit 2837

MTF
March 10, 2003